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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/591,676 | 12/14/2006 | Sebastien Andre | 29250P-000034/US | 1485 |
| 30594 7590 11/14/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 | | | EXAMINER | |
| | | | LAM, HUNG Q | |
| RESTON, VA 20195 | | | ART UNIT | PAPER NUMBER |
| | | | 2883 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 11/14/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|-----------------------|--|--|--|--|
| Office Action Comments | 10/591,676 | ANDRE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | HUNG LAM | 2883 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 27 Oc | tober 2008. | | | | | |
| | action is non-final. | | | | | |
| <i>;</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| · | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| oloood iir addordanoo wan tho pradado anadr Es | k parto Quayro, 1000 O.D. 11, 10 | 0.0.210. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-13</u> is/are pending in the application. | 4) Claim(s) 1-13 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-6,12 and 13</u> is/are rejected. | | | | | | |
| | | | | | | |
| · <u> </u> | 7) Claim(s) <u>7-11</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>01 September 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction | * | • ' | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| | 1.⊠ Certified copies of the priority documents have been received. | | | | | |
| <u> </u> | | on No | | | | |
| | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date <u>09/01/2006</u> . 6) Other: | | | | | | |

DETAILED ACTION

Status of the Application

Claims 1-13 are pending in this application.

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - **Group I.** Claims 1-13, drawn to coating layers (i.e. a chemical product) of an optical fiber, classified in class 385, subclasses 128 and 144.
 - **Group II**. Claims 16-23, drawn to a method of stripping/adjusting an optical fiber, classified in class 385, subclass 90.
- 2. Inventions of Group I and II are directed to relate as a products (i.e. optical fiber coating layers) and the method of stripping an optical fiber. The related inventions are distinct if: (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed in Group I (product) and Group II (process/method) are totally inversed from each other. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.
- 3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the

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inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

- 4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with Erin Hosman for attorney Gary D. Yacura (Reg. No. 35,416) on 27 October 2008, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Thus, Group II claims 14-15 being drawn to a non-elected invention and withdrawn from consideration for examination purposes (37 CFR 1.142(b)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fabian et al. (US. Pub. 2005/0069272)

Regarding claim 1, Fabian et al. disclose optical fiber 20 having a coating comprising at least two layers, in which a first layer 24 comprises the reaction product of a first composition comprising at least: a polyether urethane (meth)acrylate oligomer; and first and a second (meth)acrylate monomers (i.e. an oligomer, at least one monomer and photoinitiators); and in which a second layer 26 comprises the reaction product of a second composition comprising at least: a polyether urethane (meth)acrylate first oligomer; an epoxy; and first and second (meth)acrylate monomers (i.e. an oligomer, at least one monomer and photoinitiators) ("abstract", [0025]-[0027], [0046], [0050]-[0054], and Fig. 1).

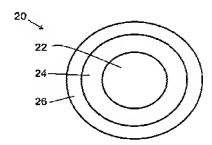


FIG. 1

Reproduced from US. Pub. 2005/0069272.

Fabian et al. do not disclose an epoxy (meth) acrylate second oligomer. However, it would have been obvious to the one having ordinary skill in the art at the time the invention was

made to use include an epoxy (meth) acrylate second oligomer into a reaction of forming the secondary layer. The motivation for doing so since "oligomers adapted for other curing chemistries, such as epoxy" or epoxy acrylate oligomers in order to achieve a desire curable compositions for secondary layer that would resulted in a stronger cured products ([0053]-[0054]).

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Regarding claims 12 and 13, Fabian et al. further disclose that in each of the layers, the first monomer represents between 5 and 60% of the total weight of the composition ([0032]).

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fabian et al. in view of Roba et al. (US. Pub. 2007/0263972).

Regarding claims 2 and 3, Fabian et al. further disclose the claimed invention except for at least one of the oligomers comprises an aliphatic/aromatic polyether urethane diacrylate.

Roba et al. disclose an optical fiber having a protective coating layers, wherein at least one of the oligomers comprises an aliphatic/aromatic polyether urethane diacrylate ([0105]).

It would have been obvious to the one having ordinary skill in the art at the time the invention was made to use the teachings of **Roba** in **Fabian** by having at least one of the oligomers comprises an aliphatic/aromatic polyether urethane diacrylate. The motivation for doing so in order to obtain "the desired oligomer" with a required elasticity value that "ensures adequate mechanical protection for the optical fiber" ("abstract", [0006], [0105]).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fabian et al. in view of Jibing et al. (US. Pub. 2004/0024080).

Regarding claim 4, Fabian et al. further disclose the claimed invention except the second oligomer of the second layer of the coating comprises a bisphenol A epoxy (meth) acrylate.

Jibing et al. teach a curable fiber optic coating composition for a coating layer, comprising a bisphenol A epoxy acrylate oligomer ([0173]).

It would have been obvious to the one having ordinary skill in the art at the time the invention was made to use the teachings of **Jibing et al.** in **Fabian** by selecting a bisphenol A epoxy (meth) acrylate as a second oligomer for the second layer. The motivation for doing so is in order to achieve a desire curing speed and providing colorless coating layer ([0171], [0174]).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fabian et al. in view of Winningham (US. Pat. 6,563,996).

Regarding claim 5, **Fabian et al.** further disclose the claimed invention except for the second monomer of the first layer is an isobomyl (meth) acrylate.

Winningham teaches a fiber optic coating composition for a primary coating layer, wherein one of suitable monomers is an isobornyl (meth) acrylate (col. 6 line 6).

It would have been obvious to the one having ordinary skill in the art at the time the invention was made to use the teachings of **Winningham** in **Fabian** by selecting an isobomyl (meth) acrylate as the second monomer for the first layer. The motivation for doing so is just a designed choice of forming a suitable combinations/compositions of monomers for the first/primary layer with suitable/available monomers

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fabian et al. in view of Roba et al. (US. Pub. 2006/0072889)

Regarding claim 6, **Fabian et al.** further disclose the claimed invention except the first monomer of the second layer is a trimethylolpropane triacrylate.

Roba et al. teach a fiber optic coating composition for a secondary layer, wherein one of monomers of secondary layer is a trimethylolpropane triacrylate ([0103]).

It would have been obvious to the one having ordinary skill in the art at the time the invention was made to use the teachings of **Roba** in **Fabian** by selecting a trimethylolpropane triacrylate as the first monomer for the second layer. The motivation for selecting trimethylolpropane triacrylate monomer would provide "a structure compatible with that of the oligomer" ([0103]).

Allowable Subject Matter

Claims 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For instance, the limitation of "the second monomer of the second layer is a polyethylene glycol diacrylate", "at least one initiator and at least one synergist, the initiator being a benzophenone and the synergist being a copolymerizable amine (meth)acrylate", "first layer represents between 45 and 85% of the total weight of the composition of the first layer and its molar mass is between 2500 and 8000 g/mol", "the first oligomer of the second layer represents between 15 and 45% of the total weight of the composition of the second layer and its molar mass is between 1000 and 10 000 g/mol", "the second oligomer of the second layer

represents between 15 and 45% of the total weight of the composition of the second layer and its molar mass is between 100 and 3000 g/mol", distinguish over the prior arts of record.

It is the examiner opinion that prior art taken alone or in combination does not disclose or render obvious to the claimed limitation discussed above.

Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fewkes et al. (US. Pat. 6,584,263).

Toler et al. (US. Pub. 2002/0168520)

Schissel et al. (US. Pat. 6,849,333).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Lam whose telephone number is 571-272-9790. The examiner can normally be reached on M - F 08:30 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Lam/
Patent Examiner, Art Unit 2883
11/10/2008

/CHARLIE PENG/ Primary Examiner, Art Unit 2883